To: Beeler, Cindy[Beeler.Cindy@epa.gov]; Daly, Carl[Daly.Carl@epa.gov]; Rothery, Deirdre[Rothery.Deirdre@epa.gov]
From: Smith, Claudia
Sent: Wed 2/3/2016 7:36:26 PM
Subject: FW: Uinta Basin Technical Planning

FYI on my effort to get more information from UDAQ supporting our proposed 18-month compliance deadline for the U&O FIP.

From: Jay Morris [mailto:jpmorris@utah.gov]
Sent: Wednesday, February 03, 2016 12:04 PM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Cc: Ostendorf, Jody <ostendorf.jody@epa.gov>; Todd Wetzel <twetzel@utah.gov>
Subject: Re: Uinta Basin Technical Planning

Hi Claudia,

I do not have any hard data supporting the 18 month time frame but I will share our experience.

For our compliance program, we target each new approval order (AO) for inspection within 18 months of the date it is issued. We will document the status of construction at the time of inspection and see if they have provided the proper notification to the division. The inspection report for each source would include the details about the status of construction. We do not compile this data into any kind of a database for tracking purposes.

In our experience conducting inspections of the existing oil and gas sources that we have permitted, the vast majority had completed the retrofit with VOC emission controls within 9 months. The retrofit does not take long once the company orders and receives the required equipment. The delays industry reported to us were almost exclusively due to a shortage of VOC emission control units. There was a back log for several months when all of these sources suddenly started ordering this equipment!

We have inspected hundreds of existing oil and gas sources without documenting a compliance issue with this condition.

If you have any questions or want to discuss this a bit more, please feel free to give me a call or email me.

I hope you have a great day!

Jay Morris | Manager | Minor Source Compliance Section

801.536.4079 (office) | 801.536.4099 (fax) | jpmorris@utah.gov (email)

On Tue, Feb 2, 2016 at 2:39 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> Hi, Jay,
>
> Todd Wetzel referred you to me. I'm not sure if you are already aware, but EPA Region 8 is in the process of developing a rule for VOC emission control of existing oil and natural gas production facilities on the Uintah and Ouray Indian Reservation that is consistent with the requirements that UDAQ imposes on equivalent existing sources in State jurisdiction (to address winter ozone issues). We have been working with the UDAQ permitting staff in developing our rule to ensure regulatory consistency across jurisdictional boundaries. One of the provisions we are looking at proposing is an 18-month compliance deadline, similar to the construction status notification language Utah has in the AOs for existing sources that have to retrofit with VOC emission controls. We are being asked by EPA management to provide a basis for proposing 18 months, more solid than simply saying it is what Utah requires. They are asking if there is any data or other evidence supporting a reasonable deadline for installation of retrofits to existing sources.

I am wondering if you would be willing to provide us a statistical sampling of installation notifications you have received for the existing source AOs issued thus far to help us determine an average installation timeframe that reflects what you all have been observing from oil and natural gas production operators? Might there already be a summary of the notifications that you all have compiled?

Let me know if this is something you might be able to assist us with.

Thank you for any assistance you can provide,

Claudia

Claudia Young Smith

Environmental Scientist

US EPA Region 8 Air Program

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http://www2.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region

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US EPA Region 8

1595 Wynkoop Street

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been received by you in error, you are instructed to delete this message from your machine and all storage media whether electronic or hard copy.

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, February 02, 2016 2:02 PM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Cc: Ostendorf, Jody <ostendorf.jody@epa.gov>
Subject: Re: Uinta Basin Technical Planning

Claudia,

The 18-month language is written into the permit as such, but is also in our state rules (R307-410-18):

"The owner/operator shall notify the Director in writing when the equipment listed in this AO has been installed and is operational. To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.□

□If the owner/operator has not notified the Director in writing within 18 months from the date of this AO on the status of the construction and/or installation, the Director shall require documentation of the continuous construction and/or installation of the operation. If a continuous program of construction and/or installation is not proceeding, the Director may revoke the AO.□□

[R307-401-18]"

The R307-401-18 rule reads:

"Approval orders issued by the director in accordance with the provisions of R307-401 will be reviewed eighteen months after the date of issuance to determine the status of construction, installation, modification, relocation or establishment. If a continuous program of construction, installation, modification, relocation or establishment is not proceeding, the director may revoke the approval order."

We actually want to move away from this 18 month language and are thinking of doing so as we work on our "permit-by-rule" language.

The reason for this is we are finding a lot of sources install everything right away so they can operate but hold off on the expensive control equipment for 18 months or more in some cases. This has been noticed with retrofits quite a bit. I don't have the numbers in front of me (currently sitting at the hospital with my pregnant wife) and truthfully I'm not sure this is something we even have numbers for. What I can tell you from what I have experienced as a permit writer and inspections in the field, and that is that the operators tend to push out controls especially retrofit controls as far as they can. It's really a unique problem we have only experienced in the oil and gas sector.

If this isn't clear I apologize it's tricky writing such a long email on an iPhone. If you have any additional questions or need more clarification feel free to send me another email.

Todd

Sent from my iPhone

On Feb 2, 2016, at 12:03 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> Hi, Todd,
>
> Thank you for assisting me last fall. I've got some more questions I am hoping you or someone else at UDAQ can assist me with.
>
> We are leaning toward an 18-month compliance schedule for our U&O Reservation-specific rule for existing sources, similar to UDAQ, but we are getting pushed by EPA

HQ to discuss a basis for the 18-month number. I looked at the UDAQ approval orders and they use the same NSR language we do in permits regarding commencing construction within 18-months in order for the AO/permit to remain valid, but it does not specifically require that retrofits be completed within 18 months. Is the 18-month compliance deadline (and extension request allowance) more of an unwritten policy, or is it specified somewhere other than the language in the approval order?

Does UDAQ have data or other anecdotal evidence of how long it has typically been taking for existing sources to install retrofits, at least from those that have actually completed the process, not the holdouts and requests for extensions you already mentioned?

Thanks for any assistance you can provide.

Claudia

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, October 13, 2015 9:25 AM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: Re: Uinta Basin Technical Planning

Claudia,

Sorry for the late reply I have been out of the office for a few days. I will try to answer the below questions as best as I can, but our compliance section grants the extension and I know the reasons for it can be vast.

1. How often do you grant requests for and 18 month extension for installing combustors?

I dont know that we grant extensions extremely often, I do know of one company that

filed for ~200 permits all at once (several years ago, and was the only company that filed for permits before operation or at least at the moment they knew they needed them). The company in question I know got an extension on ~60 of their permits, I am not sure what rational was used to give these extensions I just know they had them.

2. Do you have criteria that have to be met in order to be granted an extension?

I would be shocked if we did have specific criteria, the phrase that comes to mind and that tends to get thrown around a lot is "case by case scenario". Our compliance manager is not in today, but that is what I was told from one of his inspectors.

3. How many, if any, facilities have gotten or will get permits where a combustor will not be required starting from the permit issuance, not accounting for those whose emissions may decline after that (i.e., are there any whose facility-wide emissions are > 5 tpy, but combined emissions from tanks/dehys/pumps are < 4 tpy)?

I dont have a specific number as to how many facilities, but I would say somewhere around 30-40% of all permitted sources. Now of those 30-40% probably 60-70% need permits due to other criteria pollutants (mainly NOx and CO) from engines. The tricky part here is that load-out emissions which aren't controlled from a combustor can be in the 2-3 tpy range pretty easily, that coupled with 3-4 tons from the storage tanks puts them in the category that needs a permit.

4. Brock mentioned he thought you all were about 75% of the way to issuing the retroactive permits to existing sources. What is your timeline for issuance?

Ideally I think we would have liked to have all of these permitted yesterday, our timeline is pretty dependent upon the sources but I think our hope is to have them wrapped up in the next few months (realistically it probably will be closer to 6 months).

This may be more info than you are wanting but I always thing more info is better than not enough so here is some more info on why it has been taking so long. Their are several issues that have led to them all not being issued, and to my knowledge I only know of two companies that are not permitted yet. One of those companies is fighting the 4 tpy threshold, and have been for the past 2 years, their argument has changed

depending on the time of year (their most recent argument is related to the current commodity price of oil). They have been slow to get us information and have changed the number of sites needing permits so many times, that they are one of the companies that are not permitted. The other company has decided that combustors are economical at any facility whose emissions are above 3.12 tpy, they are well on their way to being permitted but I know they have left out some of the required information on their submittals as well.

Let me know if you have any additional questions.

Todd

On Thu, Oct 8, 2015 at 4:24 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> Hi, Todd,
>
> Thank you for continuing to work with me. We want to make sure what we develop for the Reservation is as consistent as possible with what UDAQ requires. I have some additional questions that would be very helpful if you could provide any information on.
>
> 1. How often do you grant requests for and 18 month extension for installing combustors?
>
> 2. Do you have criteria that have to be met in order to be granted an extension?
>
> 3. How many, if any, facilities have gotten or will get permits where a combustor will not be required starting from the permit issuance, not accounting for those whose emissions may decline after that (i.e., are there any whose facility-wide emissions are > 5 tpy, but combined emissions from tanks/dehys/pumps are < 4 tpy)?
>
> 4. Brock mentioned he thought you all were about 75% of the way to issuing the retroactive permits to existing sources. What is your timeline for issuance?

Thank you!

Claudia

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Monday, October 05, 2015 4:34 PM

To: Smith, Claudia
Subject: Re: Uinta Basin Technical Planning

Claudia,

They are given 18-months to get into compliance and get their equipment up to date. This is actually the time all sources both new and retroactive permits are given, we have looked into changing it and may be doing so.

The reality is that the sources are complying with the permit up to the installation of the combustor, they are holding off on installing it for the 18 months and then in some cases asking for an 18 month extension. We feel their ultimate goal is to hold off to the point where they are below the emission levels that requires a combustor without ever installing one.

Todd

On Mon, Oct 5, 2015 at 2:40 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> Good afternoon, Todd,

I have a question related to UDAQ's retroactive site-specific permits for existing oil and gas production facilities. How long after permit issuance do the existing sources need to be in compliance with the permit?

Thank you,

Claudia

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, September 29, 2015 2:38 PM
To: Smith, Claudia

Subject: Re: Uinta Basin Technical Planning

Claudia,

The intent of that rule, is that it applies to all sources that operate a combustor, regardless of the reason the combustor is there. It is basically meant to make sure that the combustor is actually doing what it is intended to do. Our compliance guys were going out and finding that ~50% of the time the combustor on site was not operating at which point the operators would go and light the pilot light and admit that they blew out pretty regularly.

I hope this helps.

Todd

On Tue, Sep 29, 2015 at 11:02 AM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

Hi, Todd,

I'm hoping you can clarify some requirements for me. The rule for existing flares to be retrofitted with auto-igniters says it applies to all flares used to control VOC emissions. Does that include flares at sources that voluntarily operate the flare, and are not required to because they are sources that have been pulled into minor source permitting requirements (individual AO or GAO), or is it just a requirement for AO/GAO sources?

Thanks,

Claudia

From: Todd Wetzel [mailto:twetzel@utah.gov]
Sent: Tuesday, September 22, 2015 4:49 PM
To: Smith, Claudia
Cc: Beeler, Cindy; Siffring, Stuart; Gilbert, Alexas; Dresser, Chris; Ostendorf, Jody; Sheila Vance; woswald@utah.gov; mberger@utah.gov; Rothery, Deirdre; blebaron@utah.gov
Subject: Re: Uinta Basin Technical Planning

Claudia,

Attached are two recent Approval Orders (AO) issued in the Uintah Basin. The language we were discussing about the well decline emissions is not in the AO, it shows up on the Engineering Review that the source has to sign that ends up in the sources file.

The language included is as follows:

"In a recently published study, "Using growth and decline factors to project VOC emissions from oil and gas production" (Journal of the Air and Waste Management Association: January, 2015), staff with the Utah Division of Air Quality calculate VOC emissions from production at new wells along with those from declining production at existing wells in the Uintah Basin. These

emissions were then adjusted downward for the impact of both existing and anticipated future VOC control strategies to estimate cumulative VOC emissions for each year from 2012 to 2018. The results demonstrate that even with a projected growth of approximately 130% the cumulative VOC emissions in the area will not increase over the same period. This study focused only on the largest VOC emission source categories; oil tanks, pneumatic devices, pneumatic pumps, and tank truck filling, associated with oil production in the Uintah Basin. The analysis was limited to oil production as opposed to gas production because close to 100% of the gas production in the Uintah Basin is found on Indian Country where air quality is regulated by EPA and the Ute Tribe rather than the State of Utah. The study authors are currently working to improve this estimation methodology so that it can be applied to Basin-wide estimates."

Let me know if you have any questions.

On Tue, Sep 22, 2015 at 4:27 PM, Smith, Claudia <Smith.Claudia@epa.gov> wrote:

> All,
>
> Thanks again for taking the time to meet with us today. The discussion was very informative and helpful.
>
> To recap our discussion today (please make any corrections if necessary), we heard that UDAQ's plans for near-term rulemaking include requiring all existing minor oil and gas sources to register regardless of whether or not their facility-wide emissions exceed 5 tpy of NSR-regulated pollutants and to tie those registrations with the emissions inventory effort with a requirement to update the emissions inventory every 3 years. This might be something EPA should look into for Indian country if we move forward with a potential FIP, for the purposes of continuity with the basin-wide emissions inventory effort.
>
> Regarding UDAQ's minor source preconstruction permitting program, we heard a recognition that there are likely many minor

sources that historically should have gotten permits to construct that did not and there is a concerted effort now to retroactively require individual permits for those sources that exceed the minor source emissions thresholds of 5 tpy. The permits that have recently been issued, and the permits that will be issued, apply present day minor source BACT, which is a case-by-case determination, but generally includes combustor control when combined emissions from combustion-controllable emissions units (i.e., tanks, dehydrators, and pneumatic pumps) exceeds 4 tpy VOC for a facility, plus annual LDAR inspections (in some cases more frequent, based on emissions in comparison to NSR major source thresholds).

Regarding cost info that UDAQ has for LDAR, it is a wide range based on information operators have submitted. There is no particular analysis that UDAQ performed.

Regarding the well decline emissions accounting method, it is used in permitting on a case-by-case basis for demonstrating that a minor source will not cause or contribute to a NAAQS violation, but not yet on a broader basin-wide emissions reduction strategy.

UDAQ did not express any concerns with EPA's current plans for a potential FIP, which would include requirements to control existing Indian country oil and gas sources with emissions that exceed 5 tpy VOC, applying minor source BACT as similar as possible to UDAQ's minor source permitting requirements, and to control all existing Indian country oil and gas sources applying current UDAQ existing source requirements (retrofit existing high bleed pneumatic controllers with low/no bleed, retrofit existing combustors with auto ignition devices, submerged/bottom fill truck loading and unloading, and proper equipment operation and maintenance).

UDAQ committed to sharing examples of minor source permits issued to oil and gas sources for EPA review so that any potential FIP language would be consistent in the interest of levelling the playing field. EPA committed to keeping UDAQ updated on our

schedule/progress and sharing any materials we can as we progress.

If we have any questions upon reviewing the example permits you provide, we will reach out at that time. If you have any questions for us, please reach out at any time as well.

Thanks,

Claudia

Claudia Young Smith

Environmental Scientist

US EPA Region 8 Air Program

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US EPA Region 8

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-----Original Appointment-----
From: Smith, Claudia
Sent: Wednesday, September 16, 2015 9:11 AM
To: Smith, Claudia; Beeler, Cindy; Siffring, Stuart; Gilbert, Alexas; Dresser, Chris; Ostendorf, Jody; Sheila Vance; woswald@utah.gov; twetsel@utah.gov; mberger@utah.gov
Subject: Uinta Basin Technical Planning
When: Tuesday, September 22, 2015 2:00 PM-4:00 PM (UTC-07:00) Mountain Time (US & Canada).
Where: EPA Prairie Rose Room; Call In: 1-866-299-9141, participant code:44585411

This meeting is to discuss UDAQ and EPA Region 8's current and planned regulation of existing oil and natural gas production sources, to ensure that regulation is consistent across Uinta Basin jurisdictions.

EPA Region 8 has the following questions for UDAQ to mull over prior to the meeting:

1. Was LDAR at well sites/pads considered BACT in minor source permits issued to oil and natural gas production facilities pre-GAO? Will it be considered BACT in the ~300-400 minor source permit applications now in house at UDAQ (estimate from Brock Lebaron). If not, is it being considered for future planned regulation of existing sources? If planned for future regulation of existing sources, will well sites be treated differently than compressor stations? Will there be a similar throughput levels below which less frequency will be required?

2. Was control of produced fluids storage tanks, dehydrators, and pneumatic pumps considered BACT in minor source permits issued pre-GAO? Will it be considered BACT in the ~300-400 minor source permit applications now in house at UDAQ? If not, is it being considered for future planned regulation of existing sources? If so, would there be uni-specific thresholds (tpy emissions or throughput) below which control is not required?

3. In the GAO, there is a stepped frequency to LDAR inspections based on throughput at certain levels (i.e., >10,000 bbls/yr and >25,000 bbls/yr). What was the rationale behind those throughput distinctions? Do those levels correlate to particular VOC tpy estimates?

4. Is there a level of uncontrolled potential VOC emissions below which individual tanks, dehydrators, pneumatic pumps, pneumatic controllers, or other controlled equipment at a >5 tpy VOC source are not required to have BACT in minor source permits issued to oil and natural gas production facilities?

5. Is the well decline accounting method currently being used to justify approval of new sources?

If UDAQ has any questions for EPA Region 8 Staff, please send them and I will add them to this invite, along with any additional questions from EPA that might come up.

Thanks,

Claudia

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Todd Wetzel

Environmental Engineer

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